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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,627	01/20/2004	Richard B. Fox	A-68881-1/ENB (468878-4)	3320

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EXAMINER

MCCARRY JR, ROBERT J

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,627

Applicant(s)

FOX, RICHARD B.

Examiner

Robert J. McCarry, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 7, 8 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usami (US 6,138,062) in view of Asanuma et al (US 5,627,754).

Usami discloses as guided vehicle adapted for travel at high expressway speeds having a pair of front wheels pivotally connected to the vehicle for steering the vehicle and operated by a steering mechanism. Sensing mechanisms in the form of laser emitters 12, 14 sense the guideway formed by the sidewalls of the side walls of the path. The laser emitters are also used to sense objects next to the vehicle and provide a signal to the steering mechanism to move the car. The vehicle is further comprised of a video camera 16 for visualizing the lane ahead of the vehicle. The entire system is controlled by an electronic control unit (ECU) or processor.

Usami discloses the guided vehicle system as disclosed above. However, Usami does not disclose the use of steering components on both the front and rear wheels. Usami discloses only steering the front wheels. Asanuma et al discloses a vehicle controlled with both front and rear wheel steering mechanisms. It would have been obvious to one of ordinary skill to have added a rear steering mechanism, like that of

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Asanuma et al, to a vehicle like that of Usami, in order to give the car better stability and maneuverability while traveling at high speeds.

Regarding claims 15-20 drawn to the method of guiding a vehicle. Usami in view of Asanuma et al disclose a guided vehicle monitoring indicators on the sides of a travel lane. The indicators are the side walls and painted lines of the roadway. Monitored by both a video camera and laser emitters on the vehicle.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Usami (US 6,138,062) in view of Asanuma et al (US 5,627,754) further in view of Uehara (US 5,938,707).

The combination of Usami and Asamura et al disclose the guided vehicle combined with front and rear steering mechanisms. However, the system does not disclose the use of guide magnets as emitters in the roadway for the vehicle to follow and use and guide markers. Uehara discloses a vehicle being guided by magnetic emitters 12 embedded in the roadway. It would have been obvious to one of ordinary skill in the art to have applied a vehicle, like that of Usami, to a guide system like that of Uehara, in order to better control the vehicle along a given roadway and at high speeds of travel.

Claims 9-14 rejected under 35 U.S.C. 103(a) as being unpatentable over Usami (US 6,138,062) in view of McCrary (US 6,169,954)

Usami discloses as guided vehicle adapted for travel at high expressway speeds having a pair of front wheels pivotally connected to the vehicle for steering the vehicle and operated by a steering mechanism. Sensing mechanisms in the form of laser

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emitters 12, 14 sense the guidpath formed by the sidewalls of the side walls of the path. The laser emitters are also used to sense objects next to the vehicle and provide a signal to the steering mechanism to move the car. The vehicle is further comprised of a video camera 16 for visualizing the lane ahead of the vehicle. The entire system is controlled by an electronic control unit (ECU) or processor.

Usami discloses the guided vehicle system as disclosed above. However, Usami does not disclose the use of couplers mounted on the vehicle for mating like vehicles together. It would have been obvious to one of ordinary skill in the art to have applied couplers, like that of McCrary, to a vehicle system like that of Usami in order to more efficiently move several vehicle to a common destination in order to save on fuel costs and promote an environmentally friendly travel option.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. McCarry, Jr. whose telephone number is (703) 305-0581. The examiner can normally be reached on Monday through Friday 8:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joseph Morano can be reached on (703) 308-0230. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

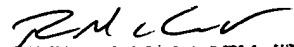
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJM
February 9, 2005



S. JOSEPH MORANO
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ROBERT J. MCCARTY, JR.
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